AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical fiber making method comprising the steps of:

inserting an optical fiber preform into a furnace core tube of a draw furnace;

heating the furnace core tube with a main heater to heat and melt a lower end portion of the optical fiber preform;

drawing an optical fiber from the lower end of the optical fiber preform;

measuring the glass draw tension of the optical fiber while drawing to obtain a measured glass draw tension; and

changing at least one of a gas flow rate ~~or~~ and gas composition of a gas supplied to a periphery of the lower end portion of the optical fiber preform in response to the measured glass draw tension to change the measured glass draw tension ~~so as~~ to ~~have~~ a predetermined ~~changing~~ value along a longitudinal direction of the optical fiber being manufactured to change a local chromatic dispersion along its direction.

2. (Cancelled)

3. (Currently Amended) ~~An optical fiber making method according to claim 1~~ An optical fiber making method comprising the steps of:

inserting an optical fiber preform into a furnace core tube of a draw furnace;

heating the furnace core tube with a main heater to heat and melt a lower end portion of the optical fiber preform;

drawing an optical fiber from the lower end of the optical fiber preform;

measuring the glass draw tension of the optical fiber while drawing to obtain a measured glass draw tension; and

changing a gas flow rate or gas composition supplied to a periphery of the lower end portion of the optical fiber preform in response to the measured glass draw tension to change the measured glass draw tension to a predetermined value along a longitudinal direction of the optical fiber being manufactured to change a local chromatic dispersion along its direction, wherein an amount of heat supplied from an auxiliary heater provided close to the lower end portion of the optical fiber preform is changed ~~in response to the changing of a gas flow rate or gas composition supplied to a periphery of the lower end portion of the optical fiber preform~~.

4. (Currently Amended) ~~An optical fiber making method according to claim 1~~ An optical fiber making method comprising the steps of:

inserting an optical fiber preform into a furnace core tube of a draw furnace;

heating the furnace core tube with a main heater to heat and melt a lower end portion of the optical fiber preform;

drawing an optical fiber from the lower end of the optical fiber preform;

measuring the glass draw tension of the optical fiber while drawing to obtain a measured glass draw tension; and

changing a gas flow rate or gas composition supplied to a periphery of the lower end portion of the optical fiber preform in response to the measured glass draw tension to change the measured glass draw tension to a predetermined value along a longitudinal direction of the optical fiber being manufactured to change a local chromatic dispersion along its

direction, wherein a part of ~~the~~ heat dissipated from the furnace core tube or the lower end portion of the optical fiber preform is controlled and ~~the~~ a dissipating condition is changed ~~in response to the changing of a gas flow rate or gas composition supplied to a periphery of the lower end portion of the optical fiber preform., so as to change the amount of heat applied to the lower end portion of the optical fiber preform~~.

5. (Currently Amended) ~~An optical fiber making method according to claim 1~~ An optical fiber making method comprising the steps of:

inserting an optical fiber preform into a furnace core tube of a draw furnace;

heating the furnace core tube with a main heater to heat and melt a lower end portion of the optical fiber preform;

drawing an optical fiber from the lower end of the optical fiber preform;

measuring the glass draw tension of the optical fiber while drawing to obtain a measured glass draw tension; and

changing a gas flow rate or gas composition supplied to a periphery of the lower end portion of the optical fiber preform in response to the measured glass draw tension to change the measured glass draw tension to a predetermined value along a longitudinal direction of the optical fiber being manufactured to change a local chromatic dispersion along its direction, wherein a positional relation between the optical fiber preform and the furnace core tube are changed ~~in response to the changing of a gas flow rate or gas composition supplied to a periphery of the lower end portion of the optical fiber preform. to change the amount of heat applied to the lower end portion of the optical fiber preform~~.

6. (Cancelled)

7. (Withdrawn) An optical fiber making apparatus comprising:

a draw furnace having a furnace core tube into which an optical fiber preform is inserted and a main heater to heat the furnace core tube, the draw furnace heating and melting a lower end portion of the optical fiber preform;

a feeder to feed the optical fiber preform into the furnace core tube;

a draw means to draw an optical fiber from the lower end of the optical fiber preform in the draw furnace;

a gas supply means for supplying a gas to a periphery of the lower end portion of the optical fiber preform;

a tension measuring means to measure an actually applied draw tension; and

a draw tension adjust means to adjust an actual draw tension to have given change along the longitudinal direction of the optical fiber to be manufactured by changing gas flow rate or gas composition by said gas supply means.

8. (Withdrawn) An optical fiber making apparatus according to claim 7, further comprising an auxiliary heater disposed close to the lower end portion of the optical fiber preform and wherein said draw tension adjust means change the heat amount from said auxiliary heater in response to changing gas flow rate or gas composition of said gas supply means.

9. (Cancelled)

10. (Withdrawn) An optical fiber making apparatus according to claim 7, further comprising:

an insulating means disposed close the lower end portion of the optical fiber preform to control heat dissipated from the furnace core tube or the lower end portion of the optical fiber preform; and

an insulating means varying device to change a position or state of the insulating means, wherein said draw tension adjust means controls said insulating means varying devices in response to changing gas flow rate or gas composition of said gas supply means.

11. (Cancelled)